

Name: _____

Date: _____ HR: _____

Heat Transfers By Conduction, Convection and Radiation

Questions to answer . . .

1. What are the three types of changes that may happen when heat transfers into or out of matter?
2. Explain how convection works to make your bedroom warm.
3. Use what you have learned about convection to explain why the floors in most homes are cold in the winter.
4. Tanning studios have become popular in the past few years. How can you get a tan in a tanning studio? Make sure you relate your answer to the science concepts we have gone over.

5. If more radiant energy was allowed to reach the surface of Earth, what do you think might happen? Why?

6. You try unsuccessfully, to open a brand new jar of pickles. You find that the lid is too tightly sealed. After running the lid under the hot water tap for a short time, you are able to open the lid. Explain what happened.

7. It is a hot day and your family decides to have ice cream with dinner. You walk the 30 minutes to the store to get 1 L of ice cream. Knowing that it will melt before you get back, you need to make a plan to get the ice cream home in its solid state. What would you do

8. Teeth are examples of solid matter. When you eat hot food or drink cold water, your teeth will expand or contract depending on the temperature inside your mouth. What would a dentist need to consider when filling a cavity?